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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/662,822

09/16/2003

Frank G. Hughes

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1099

58982

7590

11/13/2007

CATERPILLAR/FINNEGAN, HENDERSON, L.L.P.

901 New York Avenue, NW

WASHINGTON, DC 20001-4413

EXAMINER

CHANG, CHING

ART UNIT

PAPER NUMBER

3748

MAIL DATE

DELIVERY MODE

11/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/662,822

Applicant(s)

HUGHES ET AL.

Examiner

Ching Chang

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 7, 11, 13, 15-16, 18, 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 11, 13, 15-16, 18, 21-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

This office action is in response to Appellant's Appeal Brief filed 7/30/2007. In view of the arguments raised therein and the scope of the subject matter claimed prosecution is hereby reopened. All previous grounds of rejections are hereby withdrawn and a new non-final rejection is set forth below.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. ***Claims 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Nakamura (US Patent 4,505,236).***

Nakamura discloses a cylinder head for an internal combustion engine, the cylinder head comprising a top deck and at least one integrally rocker shaft pedestal (98), the pedestal comprising: a substantially flat top surface adapted to abut a flat of a rocker shaft assembly (128, 130); and opposed outer side walls having substantially flat portions adapted to abut side surfaces of adjacent rocker arms of the rocker shaft assembly to position the rocker arms; wherein the opposed outer side walls each include a spacing step adjacent a top of the pedestal; wherein the opposed outer side walls each include a second step formed beneath the spacing step.

4. ***Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (US Patent 4,505,236) in view of Neubock et al. (US Patent 6,755,172).***

Nakamura discloses a cylinder head for an internal combustion engine, the cylinder head comprising a top deck and at least one integrally rocker shaft pedestal (98), the pedestal comprising: a substantially flat top surface adapted to abut a flat of a rocker shaft assembly (128, 130); and opposed outer side walls having substantially flat portions adapted to abut side surfaces of adjacent rocker arms of the rocker shaft assembly to position the rocker arms.

Nakamura discloses the invention as recited above, however, fails to disclose the top surface of the pedestal is in the same plan as the top deck.

The patent to Neubock on the other hand, teaches that it is conventional in the engine art, to utilize a cylinder head including at least one integrally rocker shaft (3) pedestal, wherein the top surface of the pedestal is in the same plan as the top deck of the cylinder head (See Figs. 1-4).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the configuration of having the top surface of the pedestal being in the same plan as the top deck of the cylinder head, as taught by Neubock in the Nakamura device, since the use thereof would provide a more compact and easier assembled engine.

5. ***Claims 1, 7, 11, 13, 15-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (US Patent 4,505,236) in view of Neubock et al. (US Patent 6,755,172).***

Nakamura discloses an internal combustion engine comprising: a cylinder block; a cylinder head having a top deck and at least one integrally rocker shaft pedestal (98) including a top surface; a rocker shaft (128) mounted on the at least one rocker shaft pedestal, the rocker shaft having a plurality of rocker arms (130) mounted thereon; wherein the at least one rocker shaft pedestal includes a pair of opposed sidewalls adapted for correctly spacing adjacent rocker arms on each side of the pedestal; wherein the rocker shaft includes at least one flat formed on an underside of the shaft adapted for mating with a top of the at least one rocker shaft pedestal (See Figs. 7-10); in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls, each sidewall having a spacing step adjacent a top of the pedestal, which spacing steps are adapted for correctly spacing adjacent rocker arms on each side of the pedestal; in which each sidewall includes a second step formed beneath the spacing step.

Nakamura discloses the invention as recited above, however, fails to disclose the top surface of the pedestal is in the same plan as the top deck.

The patent to Neubock on the other hand, teaches that it is conventional in the engine art, to utilize a cylinder head including at least one integrally rocker shaft (3) pedestal, wherein the top surface of the pedestal is in the same plan as the top deck of the cylinder head (See Figs. 1-4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the configuration of having the top surface of the pedestal being in the same plan as the top deck of the cylinder head, as taught by Neubock in the Nakamura device, since the use thereof would provide a more compact and easier assembled engine.

### ***Response to Arguments***

6. In view of the Appeal Brief filed on 7/30/2006, PROSECUTION IS HEREBY REOPENED. A new ground of non-final rejection is set forth above.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

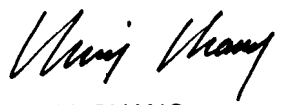
If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (571)272-4857. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571)272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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PRIMARY EXAMINER  
TECHNOLOGY CENTER 3700